DOCUMENT RESUME

ED 029 316 CG 003 891

By-McDonald, Thomas F.

Georgia's 1966 High School Graduates: A Self-Portrait.

Georgia Educational Improvement Council, Atlanta.
Pub Date May 68
Note-47p.
EDRS Price MF-$0.25 HC-$2.45
Descriptors-Educational Research, *Followup Studies, High School Curriculum, *High School Graduates, *School Surveys, *Secondary Education, Senior High Schools, Surveys, Vocational Followup

This monograph provides both objective and subjective information about Georgia's 1966 high school graduates. The emphasis of the survey was placed on (1) the graduate's own appraisal of his secondary education, and (2) his future education and/or vocational plans. A stratified cluster procedure was used with 1,850 randomly selected graduates who completed questionnaires designed to solicit demographic information. A profile is constructed of Georgia's 1966 high school graduate and sections on curriculum evaluation, post secondary education and, employment are also included. Among the conclusions were the following: (1) there is a waste of Georgia's educational manpower, (2) the educational levels of attainment are increasing over past generations due to a new set of values but, more must be done to engender these values in lower socio-economic classes; (3) a re-evaluation of subject matter is needed as many students rated subject areas as being of little use, (4) more must be done to provide post secondary educational opportunities, (5) high school counselors rank highest as a source of information for graduates, and (6) plans must be made to better accommodate the student who views high school as terminal education. (GG)

ED029316

GEORGIA EDUCATIONAL IMPROVEMENT COUNCIL
705 HARTFORD BLDG.
100 EDGEWOOD AVENUE N. E.
ATLANTA, GA. 30303

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

C600 S 971

Georgia's 1966 High School Graduates

A SELF-PORTRAIT

THOMAS F. McDONALD

GEORGIA EDUCATIONAL IMPROVEMENT COUNCIL
705 Hartford Building • 100 Edgewood Avenue, N. E. • Atlanta, Georgia 30303

MAY 1968

MEMBERS OF THE COUNCIL

CLIFFORD M. CLARKE, CAE, Atlanta, *Chairman*
Executive Vice-President, Associated Industries of Georgia

SEN. J. BATTLE HALL, Rome, *Vice-Chairman*
Chairman, Senate Educational Matters Committee

REP. J. MAC BARBER, Commerce
Chairman, House Education Committee

SEN. PAUL C. BROUN, Athens
Chairman, Senate University System of Georgia Committee

ZACK F. DANIEL, Lavonia
Daniel's Department Store

THOMAS T. IRVIN, Mt. Airy
Executive Secretary to the Governor

MCGRATH KEEN, Dublin
Vice-President, Farmers and Merchants Bank

JOHN W. LANGDALE, Valdosta
Chairman, Board of Regents, University System of Georgia

REP. CHAPPELLE MATTHEWS, Athens
Chairman, House University System of Georgia Committee

DR. JACK P. NIX, Atlanta
State Superintendent of Schools

REP. H. WALSTEIN PARKER, Sylvania
Vice-Chairman, House Education Committee

DR. JAMES S. PETERS, Manchester
Chairman, State Board of Education

SEN. LAMAR R. PLUNKETT, Bowdon
Chairman, Senate Appropriations Committee

DR. GEORGE L. SIMPSON, JR., Atlanta
Chancellor, Board of Regents, University System of Georgia

CHARLES O. SMITH, JR., Moultrie
General Manager, Smith Fertilizer and Chemical Company

JOSEPH A. WHITTLE, Brunswick
Attorney, Bennet, Gilbert, Gilbert, and Whittle

STAFF

DR. EDMUND C. MARTIN, *Executive Director*

DR. THOMAS F. MCDONALD, *Associate Director*

CLYDE WILLIAM NORMAN, JR., *Research Assistant*

RUBY S. TUCKER, *Secretary*

FOREWORD

This monograph describes Georgia's 1966 high school graduating class, with the objective of providing some insight into the graduate's appraisal of his secondary education, as well as his plans for additional education or employment. The description of the class is based on several self-reported demographic and psychometric dimensions.

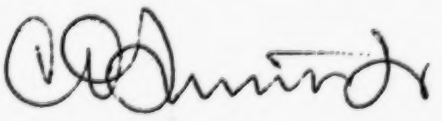
The report is directed to two audiences interested in the development of Georgia's human resources: educators and concerned citizens. The information contained in this report is for administrative, professional and public use and copies of the report are available for general distribution.

With the increasing demands for more and better education at all levels, the need for educational information is more urgent today than ever before. Almost 60 percent of the State's total appropriation has been designated for education in 1968-69. Continuing evaluation of investments of this magnitude is not only appropriate but obligatory.

This is the Georgia Educational Improvement Council's first detailed report of high school graduates. The Council was established by the General Assembly of Georgia in its 1964 session. One of the purposes and functions of the Council, as specified by statute, is to study long-range educational needs at all levels of education in Georgia and advise, assist and cooperate with appropriate groups and agencies in the improvement of education in Georgia.

The Council plans to continue to evaluate educational programs so that the effectiveness of our State's efforts in education can be constantly improved.

The Council believes that this report serves the purpose for which it was designed and sincerely hopes that it will, indeed, serve to improve education in Georgia. The Council welcomes your comments and suggestions.



CHARLES O. SMITH, JR., *Chairman*
High School Graduate Study Committee
Moultrie, Georgia
May, 1968

ACKNOWLEDGMENTS

Appreciation and gratitude are extended to all those who helped with this study.

Sincere acknowledgment is due to a number of persons whose concern and special interest facilitated the study greatly: Dr. Cameron L. Fincher, University of Georgia; Dr. Charles E. Hopkins, Georgia State College; Mr. T. W. Holley, State Department of Education; Mrs. Pat Malone and Mr. William Norman, Georgia Educational Improvement Council.

Particular appreciation is due Dr. Edmund C. Martin, Executive Director of the GEIC, for the administrative development and publication of this report.

Finally, acknowledgment is due to Mrs. Ruby Tucker and Mrs. Lillian Anderson who, together, so ably translated rough draft into finished copy.

THOMAS F. MCDONALD

TABLE OF CONTENTS

	Page
INTRODUCTION	7
Purpose of the Study	8
Plan of the Study	8
A DESCRIPTIVE PROFILE	11
Sex	11
Age	11
Marital Status	11
Academic Ability	12
Academic Achievement	14
Participation in Extra-Curricular Activities	15
Educational Levels of Household Heads	16
CURRICULUM EVALUATION	19
Adequacy of Curriculum	20
POST SECONDARY EDUCATION	23
Location of Institutions	24
Attended Institution of First Choice	26
Attended School Immediately Following Graduation	27
Primary Sources of Information on Schools	27
Sources of Financial Assistance	29
Activity Schedule for Graduates Continuing Education	31
EMPLOYMENT	33
Employment Outlook	35
Service in the Armed Forces	35
Unemployment	36
SUMMARY	39
Descriptive Profile	40
Curriculum Evaluation	41
Post Secondary Education	42
Location of Institutions	42
Attended Institutions of First Choice	43
Attended School Immediately Following Graduation	43
Primary Sources of Information on Schools	43
Sources of Financial Assistance	43
Activity Schedule for Graduates Continuing Education	43
Employment	44
Earnings	44
Employment Outlook	44
Service in the Armed Forces	45
Unemployment	45
CONCLUSIONS AND IMPLICATIONS	47

LIST OF TABLES AND FIGURES

Table	Title	Page
1	Summary of Performance on the College Entrance Examination Board Scholastic Aptitude Test	12
2	Relationship between High School Average and CEEB-SAT Scores	13
3	Reported High School Averages for Georgia's 1966 High School Graduates by Sex	14
4	Participation in Extra - Curricular High School Activities	15
5	Reported Level of Education for the Head of Household	17
6	High School Courses Believed to be Most Helpful—Least Helpful	20
7	High School Courses Needed but not Offered	21
8	Breakdown by Classification Type and Control of Institutions Attended by Georgia's 1966 High School Graduates	24
9	Mean CEEB-SAT Scores and High School Averages of Students Attending Institutions in and out of State	26
10	Primary Source of Information on Schools for those Continuing Education	28
11	Activity Schedule for Graduates Continuing Education	31
12	Reported Earnings of the Full-time Employed 1966 Graduate	33

Figure	Title	Page
1	Location of Post High School Institutions Attended by Georgia's 1966 High School Graduates	25
2	Breakdown by Sources of Financial Assistance of Students Enrolled in Post High School Programs	30
3	Breakdown by Type of Employment for Graduates Reporting Full-time Employment	34

INTRODUCTION

The primary purpose of education is to promote the development of human resources to the extent that every individual may become a productive and responsible participant of our society. Recognition of our many individual differences and the attempt to relate them to the demands of society implies that the many goals, methods, and processes of education remain in a state of flux. This is as it should be for satisfaction with/or acceptance of the status quo can only lead to stultification.

It has been estimated that man's accumulative knowledge in 1900 had doubled by 1950, doubled again by 1960, and will continue to double every ten years hence. This geometric expansion of knowledge, sometimes referred to as the information explosion, has been largely brought about by an advancing technology of inquiry and communication. It is presently impossible to assess accurately the impact of this phenomenon, but it is reasonably safe to conclude that it has and will continue to produce significant changes in our way of life. Just where these changes will take us cannot be determined; but, presently, change is man's most formidable adversary. It is essential that we equip ourselves properly in order to deal effectively with new situations.

Education is the one vehicle capable of traversing this endless and uncharted sea of change. However, it is imperative that we continually be apprised of our present position. Thus a descriptive self-portrait of the 1966 Georgia High School Graduate should provide several meaningful dimensions in pinpointing Georgia's present educational position. Further, it should afford useful information that can be transformed into fuel and material for improved alternatives and directions for education.

The high school graduate is, of course, one of the products of education. The graduate has reached one of the important milestones of his life. At this point he makes numerous decisions that will have significant implications for the many years ahead. Therefore, it seems most appropriate that we make a thorough study of past achievement and aspirations for the future based upon the graduate's own appraisal of his educational experiences.

Graduation from high school is no mean accomplishment. Georgia's 1966 high school graduate has devoted two-thirds or more of his life toward this end against considerable obstacles. Statistics provided by the State Department of Education regarding attrition rates may be viewed from two separate perspectives:

The first view—an interpretation of high attrition rates based upon this group alone without reference to other classes—may lead the reader

to find the data disappointing, depressing or even shocking. For example:

(1) Only 45.6% of the first grade of 1954-55 was graduated from high school in the 1966 class;

(2) Only 54.0% of the fifth grade of 1958-59 was graduated in the class of 1966;

(3) Only 62.8% of the ninth grade of 1962-63 was graduated in the class of 1966.

A second look—a comparison of attrition rates of the 1966 Class with that of the 1956 Class being used as a watermark—will reflect the data in a more favorable light. For example:

(1) Only 19.4% survived from the first grade of 1944-45 to graduate in Georgia's 1956 class;

(2) Only 35.8% of the fifth grade of 1948-49 reached graduation in the class of 1956;

(3) Only 52.7% of the ninth grade of 1952-53 can be identified with the 1956 graduating class.

Purpose of the Study

The purpose of this survey is to obtain both objective and subjective information about Georgia's 1966 high school graduates so as to create a descriptive self-portrait. Emphasis has been placed in studying (1) the graduate's own appraisal of his secondary education, and (2) his future educational and/or vocational plans.

The results of this investigation should provide information of both interest and value to laymen and educators.

Plan of the Study

The subjects of this survey are Georgia's 1966 High School Graduates. In the fall of 1965 the Georgia Educational Improvement Council in cooperation with the Georgia State Department of Education and the University System of Georgia completed a study of post secondary education sought by Georgia's 1965 high school graduate. One of the stated objectives of this study was to develop a systematic method, through sampling techniques, of collecting data on high school students in Georgia. The method developed was based upon historical, economic, and geographical factors of Georgia's secondary educational system and was found to be a reliable, valid, and extremely practical method of collecting data. The method can best be described as a stratified-cluster procedure with the subjects being randomly selected from the stratified clusters.

During the fall of 1966 the sampling technique was modified and applied to a study of the 1966 high school graduates.

In 1966 a total of 51,842 students graduated from Georgia's public secondary schools. These include graduates from both county and independent systems. Of these graduates approximately

. . . Forty-five percent was graduated from 12 metropolitan counties;

. . . Fourteen percent was graduated from systems in 38 counties adjacent to metropolitan counties;

. . . thirty-one percent was graduated from systems in 54 counties considered to be semi-urban;

. . . ten percent was graduated from systems in 55 counties classified as rural.

A questionnaire was designed to solicit demographic information about the 1966 graduate, his academic ability and achievement, and his present educational or vocational endeavor. The questionnaires were mailed in April of 1967 to a sample of 1850 graduates of the 1966 class. More than fifty-one percent of the questionnaires were returned; practically all were found to be suitable for tabulation and analysis.

The limitations of a survey of this type are well recognized. There is always a substantial risk in the research methods of the social sciences, but considerable effort has been made to minimize error by utilizing supplemental and cross-validating procedures.

A DESCRIPTIVE PROFILE

The data presented in this description are a reflection of Georgia's 1966 high school graduate approximately nine months after graduation. The profile includes seven dimensions: (1) sex (2) age (3) marital status (4) academic ability (5) academic achievement (6) extra-curricular activities and (7) parents' level of education.

Sex

A majority of Georgia's 1966 high school graduates were women—52 percent female to 48 percent male. This reflects a ratio of 92 males for every 100 females, which is somewhat lower than Georgia's general population ratio of 95.5 males per 100 females. It is encouraging to note that the proportion of males graduating from the state's high schools is increasing. In the class of 1946, just 20 years ago, there were only 65 males for every 100 females and 10 years ago only 80 males per hundred females were graduated.

Age

The typical male graduate was found to be about two months older than the typical female. This is not a significant difference. The 1966 male graduate is eighteen years and eight months old, while the typical female is eighteen years and six months old. The females were found to be more homogeneous than the males with respect to age. The reasons for this cannot be determined from the data available.

Marital Status

Another interesting finding relates to the marital status of this group. The typical 1966 high school graduate, male and female, has remained single (93.45% males and 83.92% females). However, there is a significantly higher percentage of females married (16.08% females and only 6.32% males). This is not an unexpected finding in that females tend to marry earlier than males. The median age of marriage for females in the general population has remained relatively stable at two and one-half to three years younger than males. Neither males nor females were found to be separated or divorced at this point.

Academic Ability

The College Entrance Examination Board Scholastic Aptitude Test (CEEB-SAT) is a measure of the student's ability to analyze and interpret written materials of the kind encountered in an academic setting. It does not purport to measure any innate capacities; it has been designed to assess abilities which are independent of any previous course work. In brief, it is neither an intelligence test *per se* nor an educational achievement test – but a mixture of both. There are two scores reported: a verbal score representing facility for linguistic concepts and expression; and a mathematical score indicating ability to deal with numerical symbols, analyze quantitative relationships, and interpret mathematical problems. It is well to emphasize that the CEEB-SAT scores represent an individual's skill in dealing with certain kinds of material at a particular stage of development. Although by no means universal, many universities and colleges require the CEEB-SAT of applicants for admission. Since 1957, the Board of Regents of the University System of Georgia has required that all entering freshmen in the undergraduate units of the University System submit, prior to admission, scores on the CEEB-SAT. The CEEB-SAT is also required by many of the private institutions in Georgia.

More than sixty percent of Georgia's 1966 graduating class reported taking the CEEB-SAT. This includes 63.47 percent of the males and 57.51 percent of the females. A summary of CEEB-SAT performance is presented in Table 1.

Table 1

Summary of Performance on the College Entrance Examination Board Scholastic Aptitude Test

	MALES	FEMALES	TOTAL
SAT-VERBAL			
Mean	477	462	470
Standard Deviation	120	109	115
SAT-MATH			
Mean	509	462	487
Standard Deviation	118	103	113

The reader is reminded that the data presented are based upon approximately 60 percent of the 1966 graduates. Presently Georgia does not have a standardized statewide testing program and it is reasonable to assume that the graduates who took the CEEB-SAT had given some thought to continuing their education beyond high school. This assumption seems valid in that the test is usually administered on Satur-

days, requires a minimum of one-half day, and the student must pay a fee of five dollars.

The CEEB-SAT scores are reported on a scale ranging from 200 to 800, and have very little meaning unless some external yardstick is applied. One comparison that can be made is performance between the males and females. The mean differences in these comparisons show the males scoring higher on both the verbal and math sections. However, the difference in the verbal mean is not significant and can best be explained as a chance factor. The mean difference in the math section is significant. These findings imply that, while there are no differences between the scores in measured verbal ability, the males hold a decisive advantage in measured mathematical ability.

Comparative normative data of this type at the national level are very difficult to obtain, but a so-called national norm of high school graduates that entered college in the fall of 1967 may be roughly estimated: The SAT-Verbal mean being 450 and the SAT-Math mean being 485.

The most current norms available for the University System of Georgia is based upon the freshman class that entered the system's colleges in the fall of 1964. At that time there were twenty units within the University System that admitted undergraduates at the freshman level. The means on the SAT-Verbal ranged from 260 to 546, while the means on the SAT-Math ranged from 294 to 635. The mean SAT-Verbal score for the entire system was approximately 431, while the mean SAT-Math was 459.

Another perspective may be gained in viewing the relationship between academic achievement (defined in terms of high school average) and academic ability (defined in terms of measured ability using the CEEB-SAT). These data are presented in Table 2.

Table 2

Relationship between High School Average and CEEB-SAT Scores

High School Average	Mean SAT-Verbal	Range	Mean SAT-Math	Range
A	540	290-760	552	260-800
B	454	200-690	475	200-710
C	414	200-750	428	230-660

The data on Table 2 reflect a very definite positive relationship between the high school average and measured academic ability. However, the overlaps are quite obvious and vividly demonstrate that the relationships are far from perfect. Several students who earned "A"

averages in high school made lower SAT scores than some of the students who earned "B" and "C" averages; and some of the "B" and "C" students made higher SAT scores than some "A" students. However, all of the mean differences between the groups are large enough to state that there are significant differences in measured ability between the students who earned "A" averages and those who earned "B" averages. The evidence also shows that the group who earned "B" averages scored significantly higher than those making "C" averages. Very few persons making an average of "D" took the CEEB-SAT.

Academic Achievement

Granted the limitations known to exist in evaluating student academic performance, it is nevertheless true that grades earned in high school are the best single predictor of post high school activities, both academic and non-academic.

Marking systems are certainly arbitrary and often ambiguous, thus making it difficult to make meaningful interpretations and evaluations. This has created an atmosphere conducive for the continuing argument that grades are over-emphasized, and perhaps this is true; yet in considering use, their importance cannot be denied or overlooked. Students and parents alike find it impossible to be unconcerned about grades.

A summary of academic achievement based upon high school averages is presented in Table 3.

Table 3

Reported High School Averages for Georgia's 1966 High School Graduates by Sex

High School Average	Percent of Male Graduates	Percent of Female Graduates	Percent of Total Group
A	13.80	19.33	16.68
B	44.80	54.89	50.05
C	38.91	24.53	31.42
D	2.49	1.25	1.85
Totals	100.00	100.00	100.00

Using a grade scale where A = 4, B = 3, C = 2, and D = 1, the mean high school average for males is 2.70, females is 2.92, and 2.82 for the total. Although the mean difference between the male and female averages is small, it is statistically significant. Females make better grades in high school than males and in most instances this phenomenon carries over

into college. This finding might suggest to some that females are intellectually superior.

Research designed to specifically test this explanation has rejected sex as being a function of intelligence. The best interpretation, with respect to sex differences, is that grades are assigned on a broader base of student performance than intellectual ability. This includes a myriad of characteristics, but, whatever the basis, females almost invariably make better grades.

Participation in Extra-Curricular Activities

The so-called extra-curricular activities afford the student opportunities for competition in areas of his own choosing and allow him to exploit his strengths and/or weaknesses. There is a tendency for students to persist in maintaining their participation in similar or related activities as they move away from the high school community.

This section summarizes the responses of graduates to questions pertaining to their participation in extra-curricular activities. Each graduate was asked to list the activities in which he participated. A breakdown of activities by types is presented in Table 4.

Table 4

Participation in Extra-Curricular High School Activities

ACTIVITIES	MALE		FEMALE		TOTAL	
	Percent	Rank	Percent	Rank	Percent	Rank
None	3.35	7	2.59	7	2.93	7
Sports	33.87	1	12.09	4	21.34	2
Music-Band	13.40	3	15.26	2	14.52	3
Publications	4.71	6	8.73	5	6.99	5
Student Gov't	5.21	5	6.24	6	5.85	6
Subject Area Clubs	26.80	2	40.50	1	34.61	1
Citizenship Clubs	12.65	4	14.59	3	13.76	4

Table 4 may be summarized as follows:

- The males led the females in participation in sports: 33.87 percent males and only 12.09 percent of the females participated in sports. Sports ranked first with males, fourth with females, and a total rank of second (21.34 percent).

- The females were more apt to engage in subject area clubs than males: 40.50 percent of the females participated and 26.80 percent of the males. Subject area clubs ranked first with females, second with the males, and an overall rank of first with 34.61 percent of the total class participating.

- More females than males participated in music-band activities: 15.26 percent females and 13.40 percent males. Music-band ranked second with the females, third with the males, and a total rank of third with 14.52 percent of the class participating.

- The females led the males in citizenship clubs: 14.59 percent females and 12.65 males. Citizenship clubs ranked third with the females, fourth for the males and the total rank is also fourth at 13.76 percent of the total class.

- Females also led the males in publications activities: 8.73 percent of the females, 4.71 percent of the males. Publications rank fifth for females, sixth for males and fifth for the overall class (6.99 percent).

- The females were more involved in student government than males: 6.24 percent females and ranking sixth; 5.21 percent of the males and ranking fifth. The total class ranked sixth in student government with 5.85 percent participating.

- Less than three percent of the graduates indicated that they participated in none of the extra-curricular activities: 3.35 percent of the males and 2.59 percent of the females.

- Practically all of the graduates participated in at least one extra-curricular activity. Seventy-one percent of the females indicated two and fifty-four percent indicated three or more. Sixty-three percent of the males indicated two activities and forty percent indicated three or more.

Educational Levels of Household Heads

The 1966 graduating class illustrates an interesting contrast with that of parents in educational levels. Georgia parents are evidencing interest in providing their children with more education, for a longer period of time, than most of the previous generations received. There are many indications of this trend, such as the support given to public schools, the financial support of students in post high school education (Table 12), and the numbers of present-day high school graduates reaching educational levels above that of their parents. The data in Table 5 show the comparison in educational level of the two generations.

Table 5

Reported Level of Education for the Head of Household

Level	Percent of Male Graduates	Percent of Female Graduates	Total
Elementary School (Grades 1 thru 7)	12	13	12
Some High School (Grades 8 thru 11)	31	32	32
High School Graduate	29	28	28
Some College or Other Post High School Study	11	13	12
College Degree	12	10	11
More than one College Degree	5	4	5
Mean	11.48	11.25	11.36
S. D.	3.32	3.30	3.31

The information in Table 5 may be summarized as follows:

- Georgia's 1966 high school graduates, at graduation, had equalled or surpassed the level of education of 72 percent of their parents.
- While only 28 percent of the graduates' parents continued their education beyond high school, more than 55 percent of the 1966 graduates continued plus an additional five percent that indicated plans to continue after military service.
- There are no differences between the male and female graduate with respect to parents' level of education. The small difference shown can best be attributed to chance.
- The level of education for the household head of the 1966 graduate is found to be significantly greater than that of the general population of Georgia, which is 9.0 years.

CURRICULUM EVALUATION

Concerning the education of our youth, Benjamin Franklin once proposed, "It would be well if they could be taught everything that is useful, and everything that is ornamental: But art is long, and their time is short. It is, therefore, proposed that they learn those things that are likely to be most useful and most ornamental, regard being had to the several professions for which they are intended." Since Franklin's time the knowledge explosion has dramatically increased the amount of subject matter and the question of what to teach in the public schools is one of major importance.

The philosophy and purpose of our educational system has been shaped largely by an unusual diversity of needs. Presently there are no absolute rules to tell us whom we should teach, what we should teach, or how we should teach. Innovations and new curriculum developments must be based upon principles that can withstand critical review. Yet, an overview of the 1966 graduate's perspective of the curriculum should serve the purpose of suggesting strengths, weaknesses, and shortcomings.

Not all students had equal exposure to all subjects. There are basically three programs that a student may select that lead to a high school diploma: (1) the academic program which is specifically geared toward college preparation; (2) the general program which may satisfy minimum requirements for college entrance; and (3) the vocational program which is geared toward the development of specific occupational skills. Some schools offer all three programs, some only the general program. Students in an academic program and some in general programs would not have taken the business and vocational subjects.

The graduate was asked to indicate three subject areas of the high school curriculum offering that were considered to be (1) most helpful and (2) least helpful. The purpose was to determine relative importance of courses as perceived by the graduate. In each category the first choice was given a weight of three, the second a weight of two, and the third a weight of one. The results are presented in Table 6 according to sex.

Table 6

High School Courses Believed to be Most Helpful—Least Helpful

SUBJECT AREAS	MOST HELPFUL				LEAST HELPFUL			
	Male		Female		Male		Female	
	%	Rank	%	Rank	%	Rank	%	Rank
Social Sciences	15	4	11	5	20	1	22	1
Physical Sciences	17	3	16	3	14	2	18	2
Mathematics	29	1	18	2	7	6	11	4
Foreign Language	2	8	4	7	11	4	9	5
Language Arts	25	2	27	1	10	5	6	6
Business Education	4	6	15	4	3	8	4	8
Vocational Education	5	5	7	6	5	7	5	7
Miscellaneous	3	7	2	8	12	3	12	3
No Response	–		–		18		13	
TOTAL	100		100		100		100	

Data in Table 6 indicate differences of opinion between sexes with respect to areas considered most helpful and least helpful. The top three areas considered most helpful by both males and females were mathematics, language arts and physical sciences. Seventy-one percent of the males and 61 percent of the females ranked these subjects most helpful. Except for mathematics, which was more highly valued by the males, the differences between the sexes on the top three areas were not significant.

There was general agreement on the three areas considered least helpful—social sciences, physical sciences and miscellaneous (art, music, drama, driver education, etc.). Forty-six percent of the males and 52 percent of the females rated these courses least helpful.

The position of physical sciences among the three most helpful and the three least helpful suggests the diversity in student interests.

Adequacy of Curriculum

In addition to the courses considered to be most helpful and least helpful, the graduates were asked to indicate subject areas of their high school curriculum that they believed were needed but not offered. The results are presented in Table 7.

Table 7

High School Courses Needed but not Offered

SUBJECT AREAS	Courses Needed but not Offered MALE %	MALE Rank	FEMALE %	FEMALE Rank
Social Sciences	10	3	15	1
Physical Sciences	9	4	6	6
Mathematics	6	6	5	7
Foreign Language	11	2	10	3½*
Language Arts	8	5	11	2
Business Education	2	8	10	3½*
Vocational Education	5	7	3	8
Miscellaneous	12	1	9	5
No Response	37		31	
Total	100		100	

**Tied Rank*

In the section for indicating courses needed but not offered 37 percent of the males and 31 percent of the females made no response. This implies that approximately one-third of the 1966 graduates believed their curriculum was broad enough to meet their needs. A statement of clarification seems appropriate at this point to avoid misinterpretation of the data.

For example, the six percent of males indicating that mathematics was needed but not offered should not be construed to mean that mathematics was not offered at all, but rather that the student believed he needed an additional mathematics course such as advanced algebra or calculus, and it was not offered. However, there are high schools in Georgia that do not offer any courses in certain areas, e.g., foreign languages or science courses, which require laboratory experience, etc.

Thirty-three percent of the male graduates indicated that they needed courses in miscellaneous areas (art, music, drama, driver education, etc.), foreign languages, and social sciences, while 46 percent of the females believed they needed courses in social sciences, language arts, foreign languages, and business education.

The reader's concern in the area of curriculum will vary considerably and he may wish to make comparisons of his own. However some of the more salient implications gleaned from Tables 6 and 7 are:

1. Members of the class of 1966 indicated that their high school experiences, at least in part, have been helpful in pursuing their post high school endeavors.

2. A large majority (84%) of the 1966 class has indicated that there are areas within the curriculum that have afforded very little toward post high school endeavors.

3. A considerable majority (65%) believed that the high school curriculum was not broad enough to prepare them for their present endeavor.

POST SECONDARY EDUCATION

The increasing number of high school graduates continuing their education beyond high school is one of the verities of our time. This is one of the effects of our rapidly changing occupational structure. An advancing technology has provided machines that can do many things faster, more efficiently, and more economically than manual labor. To be sure, this has eliminated many jobs, especially at the unskilled and semi-skilled levels of the occupational scale. However, there has been a corresponding increase of jobs at the skilled, service, sales, technical and professional levels which require more education and training.

There was a time in our not too distant past when education beyond high school was primarily for the few who could afford such luxuries. We are now in another era where few can afford not to continue their education, according to their abilities, regardless of their station in life. Evidence that new educational values have taken root is demonstrated by the more than 55 percent of the 1966 graduating class who decided to continue formal education beyond the secondary level. A breakdown by classification type and control of institutions is presented in Table 8.

Statistics concerning the proportion of the population continuing education beyond high school are of vital import in decision-making and long-range planning. Methods used in gathering this data vary considerably and have been unsatisfactory. One method compares the census count of the defined college-age population with the actual college enrollment of a county, city, district, or state. The problem with this method is that the census count is based upon the physical location of people rather than their legal residence. Areas of the county that have large military installations will reflect large college-age populations that are, in fact, not even eligible to attend college. Another source of error is the method of counting. Some reporting agencies include any form of post high school education as college while others count only those attending fully accredited two and four-year colleges.

The method employed in this survey cannot be defended as infallible. There is a selective bias known to exist in the return of questionnaires from college students, i.e., the probability of return is greater for persons attending college than those who do not attend. However, knowing this weakness makes it possible to make reasonably accurate estimates with a higher degree of confidence.

Table 8

Breakdown by Classification Type and Control of Institutions Attended by Georgia's 1966 High School Graduates

TYPE & CONTROL	PERCENT OF MALE GRADUATES	PERCENT OF FEMALE GRADUATES	TOTAL
Senior Public	28.26	25.59	26.92
Junior Public	9.30	3.30	6.14
Senior Private	8.00	7.93	7.98
Junior Private	2.61	2.15	2.37
Vocational-Technical	9.21	6.22	7.66
Business School—Private	.90	3.53	2.26
Nursing School	–	3.32	1.72
TOTALS	58.28	52.04	55.05

The data in Table 8 may be summarized as follows:

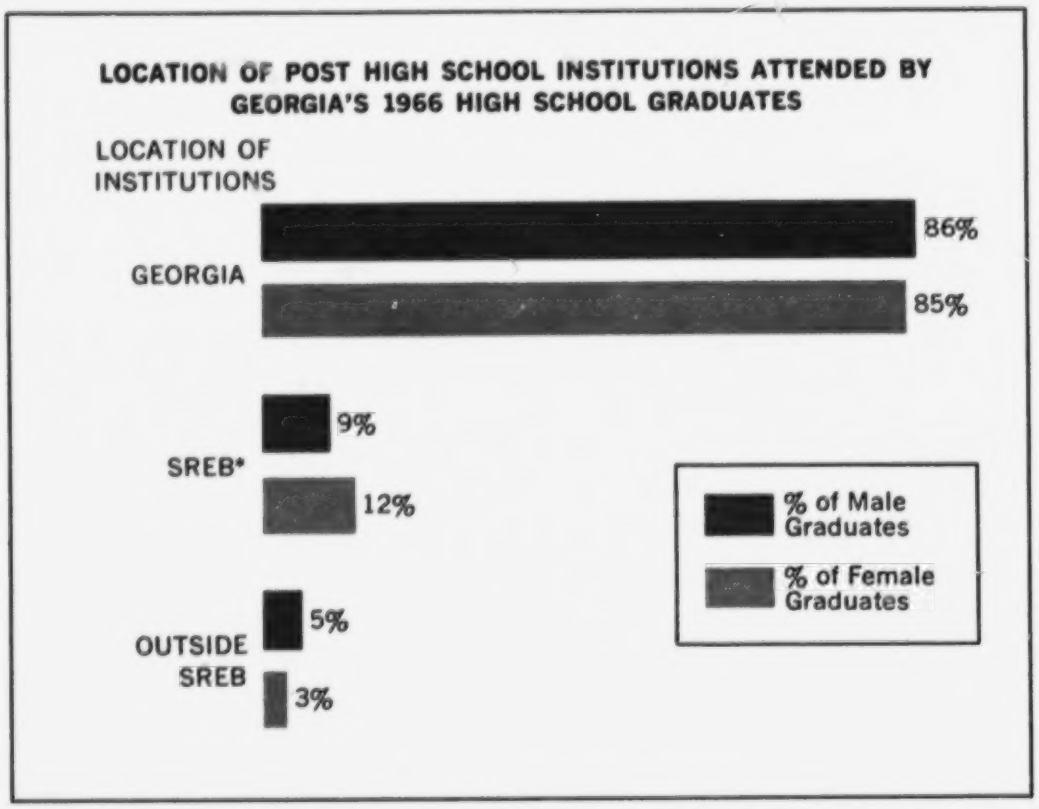
- More males (58.28 percent) than females (52.04 percent) continued their education beyond high school.
- Both males and females prefer a four-year public institution (49 percent of those continuing education).
- Of those continuing their education, 74 percent selected institutions supported by public funds.
- More than three out of five attended a senior college (private and public) with a sex ratio of 108 males per 100 females.
- One of every six attended a junior college with a sex ratio of 218 males per 100 females.
- One in seven that continues attended an area vocational-technical school with a sex ratio of 148 males per 100 females.
- About four percent of those continuing their education attend privately operated schools of business. The sex ratio is 25 males per 100 females.
- Another 3.1 percent of the continuing education group enrolled in all types of nursing schools. The nursing profession is predominantly female, but is open to males.

Location of Institutions

The institutions attended by Georgia's 1966 graduates are heavily concentrated in Georgia, thinned out in the bordering and other southern regional states, and scattered sparsely over the rest of the country. These data are based upon responses from the 58.28 percent of the male graduates and 52.04 percent of the female graduates who continued

with some form of post secondary education. The location of these institutions is summarized in Figure 1.

Figure 1



**The member states of the Southern Regional Education Board (SREB) are: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia.*

Eighty-five percent of the graduates continuing their education selected an institution located within the state. Approximately 86 percent of the males and 85 percent of the females enrolled in Georgia institutions.

- Fifteen percent left the state for their higher education: 14 percent males and 15 percent females.
- Of those leaving the state, 11 percent attended schools in the five bordering states and other southern states that are members of the SREB: nine percent males and 12 percent females.
- Only four percent attended a school outside the SREB area; five percent of the males and three percent of the females.

A comparison of CEEB-SAT performance and the High School Average of the students attending institutions within the state, students attending institutions within SREB, and students attending institutions located in states outside SREB, is presented in Table 9.

Table 9

Mean CEEB-SAT Scores and High School Averages of Students Attending Institutions in and out of State

	Georgia's 1966 High School Graduates Attending:			
	Institutions in Georgia	Institutions in SREB States	Institutions outside SREB States	Total
SAT-Verbal.....	460	495	590	470
SAT-Math.....	476	530	585	487
High School Average.....	2.91	2.99	3.47	2.94
Percent of Graduates.....	85	11	4	100

Data in Table 9 reflect large and significant differences in measured academic potential between students who attend institutions within the state and those who go out of state. These differences can best be explained as a function of the type of school attended. For example, only 62 percent of the students attending school in Georgia enrolled in four-year degree granting institutions. For students who enrolled in institutions in the SREB states and students who go outside of SREB, 88 percent and 94 percent, respectively, enrolled in four-year degree granting institutions. The large majority of students leaving the state select the larger well-known state universities and the small highly selective private liberal arts colleges and universities.

The evidence shows that the students who leave the state are better prepared to deal effectively with post high school programs than those who stay in the state. However, they represent only a small percentage of the total group and for the typical student who leaves the state there are more than two like him that remain. Also the in-migration of students from other states tends to balance the out-migration. For example, in 1966 three of the most prestigious institutions in Georgia were composed of approximately 47, 60, and 70 percent non-resident students, respectively.

Attended Institution of First Choice

The increasing number of applicants to institutions of post high school education coupled with limitations of classrooms, laboratories, and other instructional facilities has forced many institutions to accept smaller and smaller proportions of those applying for admission. There are still many institutions, however, that are presently experiencing difficulty in finding enough students to justify their present facilities. Institutions faced with this problem are, in the main, small private institutions affiliated with churches or other organizations. The larger institutions,

particularly the prestige schools, receive applications from many students who do not actually intend to enroll.

The problem is familiar to school administrators and to applicants. The administrator is concerned with maximum utilization of staff and physical plant; the applicant is anxious to be admitted to the school of his choice. Students apply to three or more schools to increase the chances of being accepted by one. Administrators must accept more students than the institution can accommodate, since many of the accepted students will actually enroll elsewhere.

There is no absolute solution to this problem, although it is being reduced by early decision programs and improved counseling. High school counselors can contribute significantly by providing information to students and parents regarding the institutions under consideration. Counselors cannot make decisions for students, but counselors can provide invaluable service in helping the student realistically evaluate his potential for success at various institutions. Then the student can consider alternatives, make his decision and accept responsibility for his own action.

- Eighty-two percent of the 1966 graduates who are continuing their education were accepted by the institution of their first choice (86 percent females and 78 percent males).
- Students attending second and third-choice schools are not necessarily less qualified academically. More than 44 percent of those not attending first-choice schools have combined SAT Verbal and Math scores of 1000 or more.

Attended School Immediately Following Graduation

Some students enroll in school immediately following graduation rather than take the normal summer break. There are various reasons for this, e.g., some students want to get through quicker, some feel that they need remedial or supplemental work; and there are several schools that adjust their admission standards for summer term to afford "poor risk" and marginal students an opportunity to prove themselves. These schools operate what is called a summer on-trial program. This gives some students who would not be admitted for the regular fall term a chance to prove themselves capable. If they demonstrate they can do the work effectively, they are eligible to continue into the fall term.

Whatever their reasons, approximately nine percent of the 1966 class enrolled in some type of school immediately following graduation. This is more than 16 percent of those who continued their education and represents 14 percent of the males and 17 percent of the females.

Primary Sources of Information on Schools

How does a student learn about vocational and educational opportunities? There are many sources for this information, but no one is

able to anticipate all the information that might be desired about a particular institution. Catalogues, brochures, directories, etc., attempt to answer the most pertinent and frequently asked questions about a particular program or institution, but fall far short in providing other pertinent information. Occasionally new policies have to be developed by the institutions such as provisions for boarding blind students who have seeing-eye dogs, providing elevator service for various handicapped persons, or providing special diets in the dining hall. One student with an allergy needed to know the type of disinfectant and wax used by the institution. Then, there are questions about the community and its social life that can only be answered satisfactorily by persons who have similar values and perspective as the inquirer.

The 1966 graduate was asked to indicate what he considered to be his primary source of guidance and information concerning post high school educational opportunities. These data are presented in Table 10.

Table 10

Primary Source of Information on Schools for those Continuing Education

	MALES		FEMALES		TOTAL	
SOURCE	Percent	Rank	Percent	Rank	Percent	Rank
Parents	24	2	26	2	25	2
Counselors	34	1	27	1	31	1
Teachers	8	5	7	5	7	5
Friends	14	4	23	3	18	3
Advertisements	5	6	6	6	6	6
Other-College Nights	15	3	11	4	13	4
TOTALS	100		100		100	

The data in Table 10 may be summarized as follows:

- High School counselors rank highest as the primary source of information for both males and females: thirty-four percent of the males and more than 27 percent of the females.
- Parents ranked second highest for both males and females with 24 percent of the males and 26 percent of the females.
- Twenty-three percent of the females indicated that friends were their primary source of education information compared to 14 percent of the males. Friends rank third with the females and fourth with males.
- The category other, i.e., college nights, correspondence with the institution, etc., ranked third with the males and fourth with the

females. This represents 15 percent of the males and approximately 11 percent of the females.

- Teachers and advertisements ranked fifth and sixth respectively for both males and females. Approximately eight percent of the males and seven percent of the females indicated teachers as their primary source of education information. Five percent of the males and approximately six percent of the females used advertisements as their primary source.

Sources of Financial Assistance

The fact that we spend such large sums of money on public education must be very confusing to the foreign visitor who has heard much about our democratic way of life and observed our fervent attitude toward the private enterprise system.

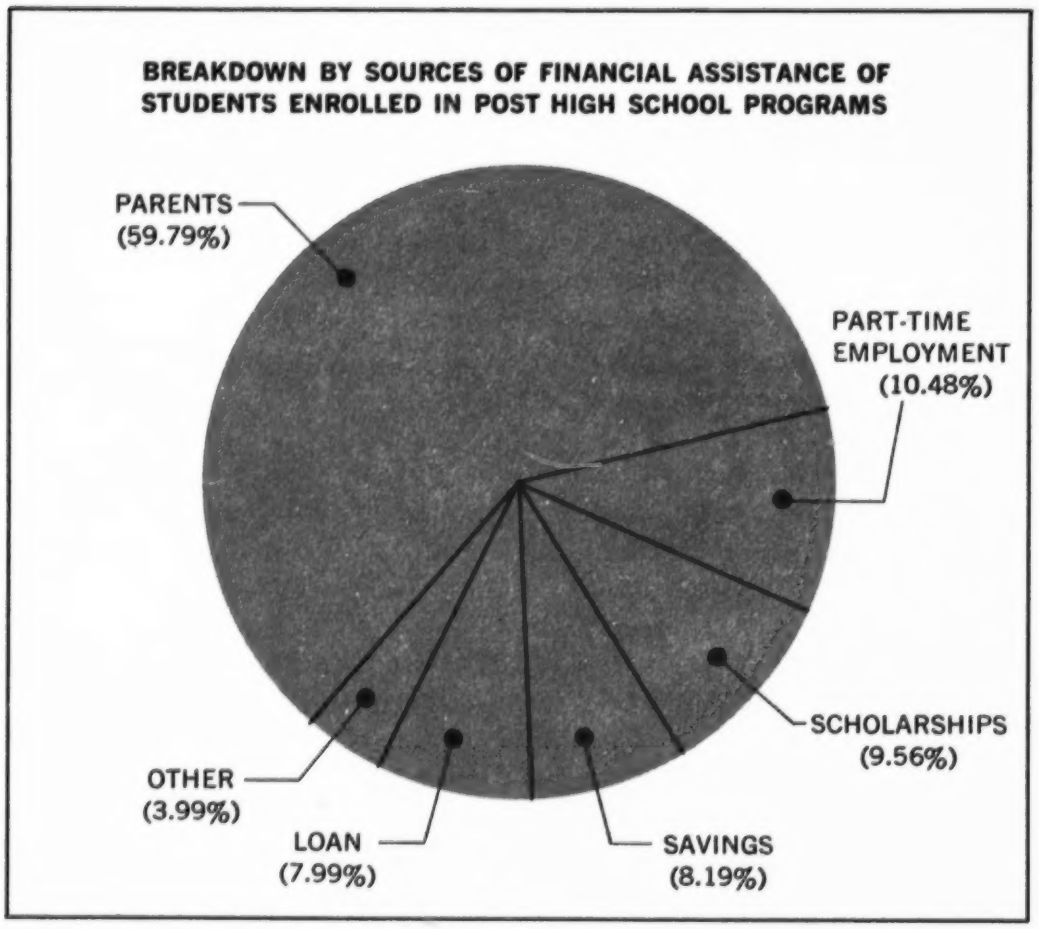
Directly financing or underwriting educational cost has become one of the major obligatory functions of government at the local, state and federal levels. Education at public expense ranges from preschool to postgraduate, professional and adult extension programs. The institutions categorized as "private," which rely on philanthropic resources, also receive public aid in the form of tax exemptions. Research and construction programs at larger institutions rely heavily on federal support. State government directly supports all units of the University System and the vocational-technical schools.

Education beyond high school has become more specialized and expensive. The cost of education is usually shared by the recipient in the form of tuition, books, fees, etc. In very few cases does the cost to the student approach the total cost of education, and in specialized and professional fields, tuition usually represents a small percentage of total educational costs. There are, to be sure, a few institutions which offer educational instruction for the purpose of profit, but they represent a very small minority. Most institutions supply a large part of educational costs through public support, endowment or gifts.

The portion of educational costs paid by students is increasing each year, and represents a sizeable, though important, investment. Even in institutions which have no tuition charges, such as the state vocational-technical schools, students have living expenses. Students in all post high school education must have some source of financial support.

The 1966 graduates enrolled in post high school programs were asked to indicate, by approximate percentages, the sources of their financial assistance in attending school. The results are presented in Figure 2.

Figure 2



The data in Figure 2 may be summarized as follows:

- The largest single source of financial assistance is "good ole" Mom and Dad. The males indicated that their parents paid approximately 55 percent of their educational expenses; while the cost to parents of females is approximately 65 percent. This source ranks first for both males and females.
- Part-time employment ranked second totally and accounts for more than 10 percent of the student's cost. The males earn approximately 13 percent of their expenses compared to about eight percent for the females. Part-time employment ranks second for males and third for the females.
- Scholarships provide approximately 10 percent of the total cost and rank third totally. There are no real differences between sexes in this source. Scholarships provide about 10 percent of the males' educational expense and rank third. The female receives more than nine percent of her expenses through scholarships and this source ranks second.
- Savings provide for more than eight percent and rank fourth totally, the males defraying more than nine percent of their expenses with

savings and the females spending approximately seven percent from savings. Males rank this source fourth while females rank it fifth.

- Loans rank fifth totally with the males ranking this source fifth and the females ranking it fourth. Approximately nine percent of the males' expenses are paid with borrowed money compared to seven percent for the females.
- The category "other," which includes funds from full-time employment, trusts, social security benefits, gifts, etc., ranks sixth for both males and females. This source accounts for approximately five percent of the males' expenses and more than three percent for the females' expenses.

Activity Schedule for Graduates Continuing Education

The pursuit of post high school education is considered by many to be equivalent to a 40 to 60 hour work week depending, of course, on the type of program and ability of the student. Being free of major financial responsibilities and able to expend full time and energy toward educational activities approaches the ideal situation. There still exists, however, a vestige from earlier times that considers physical work to be essential for students continuing their education beyond high school. There is still merit in this philosophy, especially when the work activities are closely related to the educational program. In recent years, this function has been carried out in the form of laboratory, shop, and practicum experiences which relate directly to the students' educational-vocational objectives.

There are many capable students who must earn as they learn; otherwise they would not be able to continue their education. This usually lengthens the program significantly and demands above-average social and emotional maturity. There are other obstacles that the part-time student must overcome to complete a program, but many do so.

An activity schedule of the 1966 graduates that continued their education is presented in Table 11.

Table 11

Activity Schedule for Graduates Continuing Education

TYPE OF PROGRAM ENROLLED	MALES Percent	FEMALES Percent	TOTAL Percent
Full-time Student	80	85	83
Work Full-time—Day Classes	4	1	2
Work Full-time—Night Classes	3	1	2
Work Part-time—Day Classes	10	10	10
Work Part-time—Night Classes	2	2	2
Extension Work	1	1	1
TOTAL	100	100	100

The data in Table 11 may be summarized as follows:

- More than 83 percent of the 1966 graduates who are continuing their education are full-time students. This includes 80 percent of the males and more than 85 percent of the females.
- A little more than two percent work full-time and attend day classes. This includes approximately four percent of the males and about one percent of the females.
- Approximately two percent work full-time and attend night classes. The males outnumber the females three to one percent in this category.
- Slightly more than 10 percent of the continuing education group work part-time and attend day classes. Ten percent of the males and 10 percent of the females were found to be in this category.
- A small percentage, slightly less than two percent, work part-time and attend night classes. This includes less than two percent of the males and two percent females.
- One percent of the total class worked either part or full-time and took some form of extension work. This includes more than one percent males and slightly less than one percent of the females.

The average number of hours worked per week was 22 for the total working group. The males that worked and attended school worked an average of 26 hours per week, while the females that worked averaged only 16 hours per week.

EMPLOYMENT

High school graduation is the terminal point of education for many Georgians. About one-third of the 1966 graduates entered full-time employment directly from high school. This group included slightly more than 33 percent of the females and approximately 30 percent of the males.

The positive relationship between income level and education is reflected in the earnings of the 1966 graduates. The estimate of 1966 per capita income for Georgia was $2,311, and $2,940 for the United States. The average annual income reported by the 1966 Georgia graduates was $3,474, with the males averaging $3,647 and the females, $3,315. A breakdown of the 1966 graduates' reported earnings is shown in Table 12.

Table 12

Reported Earnings of the Full-time Employed 1966 Graduate

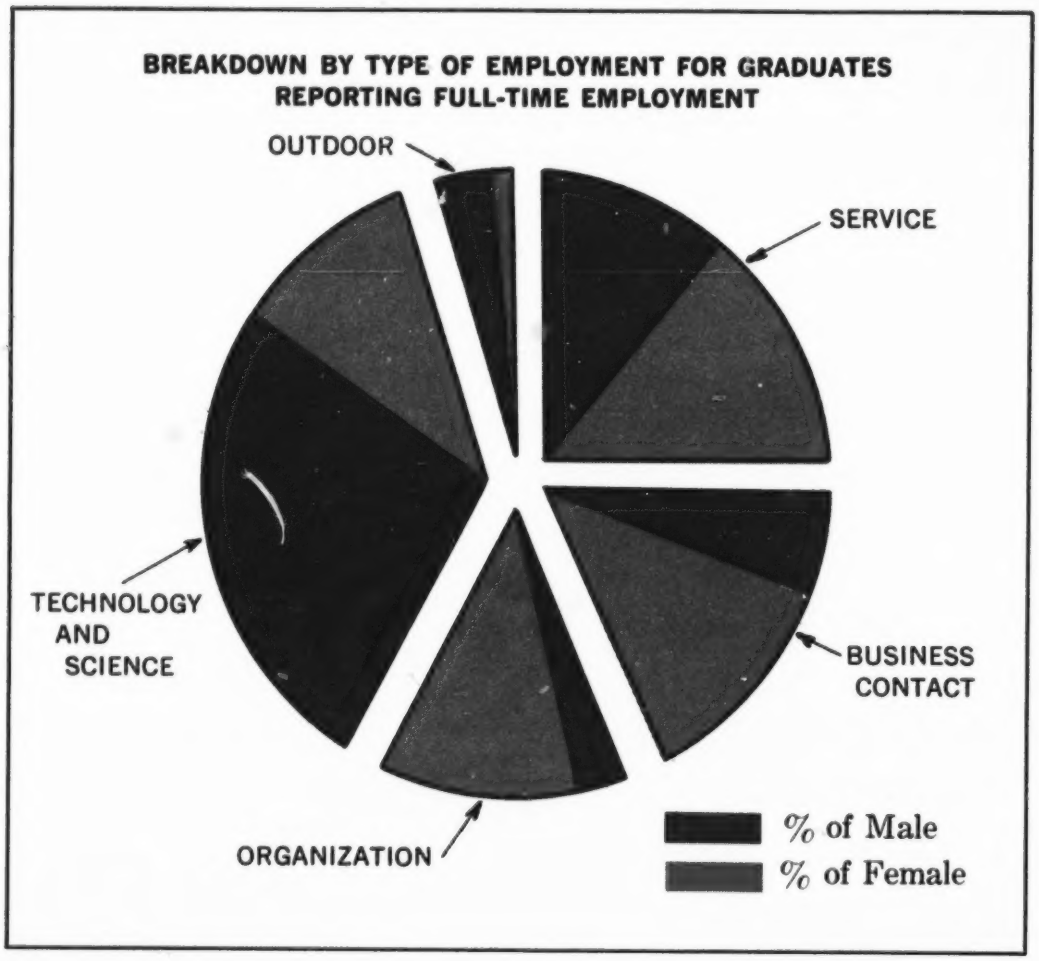
REPORTED INCOME (Annual)		MALE	FEMALE	TOTAL
Less than $50 per week....	($1950)	18%	22%	20%
$50-74 per week.....	($3250)	41%	53%	47%
$75-99 per week.....	($4550)	30%	23%	27%
$100-124 per week.....	($5850)	9%	2%	5.5%
$125-150 per week.....	($7150)	1%	—	.5%
Estimated Mean Annual Income...		$3647	$3315	$3474

The data in Table 12 afford information for many comparisons which the reader may wish to make. Some of the more salient findings are summarized as follows:

- Four out of every five of the 1966 graduates earn more than the reported Georgia and National per capita income index for 1966.
- The typical male graduate reports $332 more annual income than the typical female, during their first year out of high school.
- Approximately six percent of the high school graduates report mean annual income of $5850.
- Eighteen percent of the males and 22 percent of the females report income for full-time employment that is less than the current minimum wage standard.

Each graduate was asked to briefly describe his present occupation. These job descriptions were analyzed and grouped into five classifications for tabulation. The results are presented in Figure 3.

Figure 3



SERVICE

Occupations serving and attending to personal tastes, needs, and welfare of others, guidance, social work, domestic and protective service, ministers, education and entertainment fields.

BUSINESS CONTACT

Face-to-face sale of commodities, investments, real estate and services.

ORGANIZATION

Managerial-white collar jobs in business, industry and government.

TECHNOLOGY AND SCIENCE

Occupations concerned with production, maintenance and transportation of commodities and utilities, engineering, crafts, repairs, machine trade, and application of scientific theory.

OUTDOOR

Agricultural, fishery, forestry, mining and kindred occupations concerned with cultivation, preservation and gathering of crops, of marine resources, minerals, and forest products.

The data in Figure 3 may be summarized as follows:

- Forty percent of the full-time working graduates selected jobs in technical and scientific areas. These jobs require skill in using the hands, tools, and machines and traditionally attracts more males than females. Fifty-nine percent of the males selected jobs in this area as opposed to 25 percent of the females.
- Twenty-five percent of graduates selected service occupations. This included 28 percent of the females and 21 percent of the males.
- Eighteen percent chose business contact jobs which require a constant inter-personal relationship with other people. The female significantly outnumbers the males in this classification 24 to 11 percent.
- Fourteen percent chose organizational occupations with the females again outnumbering the males 22 to four and one-half percent.
- Only three percent of the graduates selected outdoor occupations with the males outnumbering the females four and one-half to one.

Employment Outlook

There are many varied reasons why people select a particular type of employment. It is expected that the majority of people entering the work force will make several changes in employment prior to making any final decisions concerning their life's work. The 1966 graduates were asked to indicate the length of time they expected to continue in their present occupations.

- Twenty-nine percent indicated they plan to change jobs within a few months. This included 30 percent of the males and 28 percent of the females.
- Another 10 percent indicated they did not expect to remain on their present job for more than another year. This included 13 percent of the males and eight percent of the females.
- Fourteen percent said they planned to remain on their present job for the next two to five years. This included nine percent of the males and 18 percent of the females. Many females expressed expectations of working two to three years after marriage and quitting in order to begin their families.
- Forty-seven percent indicated they had no plans for changing jobs and expected to work for their present employer in some capacity for an indefinite period. This includes 48 percent of the males and 46 percent of the females.

Service in the Armed Forces

Since the Congress of the United States passed the Universal Military Training and Service Act in the early 1950's, the male youth of America

has been faced with some form of military obligations. The original act has been amended several times but in essence the requirements for military service are still in effect. There are various ways to satisfy this obligation, but many believe they cannot make definite plans for their future until their service commitment has been completed. Although service is obligatory, it affords the individual advantages and opportunities to better himself. Veteran benefits are well publicized and have undoubtedly served as a favorable inducement to many high school graduates.

Other than the Reserve and National Guard, the two major avenues of entry into the armed forces are voluntary enlistment and by Selective Service. It should be noted here that females can and do enter the Armed Forces by voluntary enlistment. More than five percent of the 1966 high school class entered the Armed Forces during their first year out of school. They were, of course, predominantly males. Approximately 11 percent of the males entered the Armed Forces after graduation and less than one-fifth of one percent of the females.

- Of the 11 percent of the males entering service, 73 percent enlisted voluntarily and 27 percent were inducted through the Selective Service. Of course, all of the females enlisted voluntarily.
- Approximately four percent of those who entered service are giving serious consideration to making it their career.
- More than 84 percent plan to take advantage of their educational benefits immediately after discharge. Forty-two percent expect to attend a college or university; 43 percent expect to attend a vocational-technical school; and a small percentage plan to attend business and other schools.

Unemployment

The percentage of the unemployed runs highest in the 14 to 19 year age bracket. The reason for this is not well understood, but sex, race, education, lack of experience, and reluctance to relocate are contributing factors. The high drop-out rate puts many of our youth in the labor market at an early age and there are only a limited number of jobs at the unskilled and semi-skilled levels, with very few of these affording opportunities for advancement. The high school graduate often has the requisite abilities but lacks experience and some employers prefer not to hire males who have not completed their military obligations.

Reluctance to relocate is another contributing factor, especially with young females whose parents prefer them to stay home and be unemployed rather than move to a large community. Statistics regarding female unemployment are at best nebulous since so many females enter and leave the labor market without planning for long-term employment.

There was, perhaps, some confusion on the part of many females who indicated they were "unemployed housewives." Since there was no

way to determine whether or not they were available for work, it was assumed they were not. Six percent of the females indicated they were unemployed while an additional nine percent listed themselves as housewives or unemployed housewives.

Less than one percent of the 1966 male graduates reported themselves to be unemployed.

SUMMARY

Education is Georgia's biggest business. The primary objective of this huge effort is to promote the development of Georgia's human resources to the extent that every individual may become a productive and responsible participant of our society. Recognition of our many individual differences and the attempt to relate them to the demands of society implies that the many goals, methods, and processes of education remain in a state of flux.

The high school graduate is one of the products of education. He has devoted two-thirds or more of his life toward this end and at this point makes numerous decisions that will have significant implications for the many years ahead. Therefore, it seems most appropriate to examine past achievement and aspirations for the future based upon the graduate's own appraisal of his educational experiences.

The objective of this survey was to obtain both objective and subjective information about Georgia's 1966 high school graduates so as to create a descriptive self-portrait. Emphasis has been placed in studying (1) the graduate's own appraisal of his secondary education, and (2) his future educational and/or vocational plans.

The subjects of the survey are Georgia's 1966 High School Graduates. A sampling technique developed in a cooperative effort by the Georgia Educational Improvement Council, the State Department of Education, and the University System of Georgia was modified and applied to this study of the 1966 high school graduates. The method is best described as a stratified-cluster procedure with the subjects being randomly selected from the stratified clusters. In 1966, a total of 51,842 students graduated from Georgia's public secondary schools. These include both graduates from county and independent systems. Of these, approximately 45 percent were graduated from 12 metropolitan counties; fourteen percent were graduated from systems in 38 counties adjacent to metropolitan counties; thirty-one percent were graduated from systems in 54 counties considered to be semi-urban; and 10 percent were graduated from systems in 55 counties classified as rural.

A questionnaire was designed to solicit demographic information about the 1966 graduate, his academic ability and achievement, and his present educational or vocational endeavor. The questionnaires were mailed in April 1967 to a sample of 1850 graduates of the 1966 class. More than 51 percent were returned; practically all were found to be suitable for tabulation and analysis.

The survey yields a multi-dimensional self-portrait of Georgia's 1966 High School Graduate. In brief, findings in the major areas of inquiry are as follows:

Descriptive Profile

- The majority of Georgia's 1966 graduates are female; fifty-two percent are females contrasted to 48 percent males.
- At graduation the average male was only one month away from his eighteenth birthday, while the female was found to be seventeen years and nine months.
- Nine months following graduation, the typical 1966 graduate, male and female, has remained single (93 percent males and 84 percent females).
- A significantly higher percentage of females were married (16 percent females and six percent males).
- Approximately 60 percent of Georgia's 1966 class reported taking the CEEB-SAT. This includes 63 percent of the males and 57 percent of the females.
- Of those reporting their CEEB-SAT scores, the mean SAT-Verbal was 470 and the mean SAT-Math was 487.
- The mean SAT-Verbal score is 477 for the males and 462 for the females. The mean SAT-Math score is 509 for males and 462 for females.
- Approximately 17 percent of the 1966 graduates completed high school with an A average; fifty percent report a B average; thirty-one percent had a C average; and two percent reported an average of D.
- The female made significantly higher grades in high school than the male.
- Practically all of the 1966 graduates participated in some form of their high school extra-curricular program.
- A larger percentage of females participated in extra-curricular activities, and more females than males participated in two or more activities.
- A ranking of the extra-curricular activities according to participation shows the females preferring:

1. Subject Area Clubs	40 percent
2. Music-Band	15 percent
3. Citizenship Clubs	14 percent
4. Sports	12 percent
5. Publications	9 percent
6. Student Government	6 percent

- A ranking of extra-curricular activities according to participation shows the males preferring:

1. Sports	34 percent
2. Subject Area Clubs	27 percent
3. Music-Band	13 percent
4. Citizenship Clubs	13 percent
5. Student Government	5 percent
6. Publications	4 percent

- Georgia's 1966 high school graduates, at graduation, had equalled or surpassed the level of education of 72 percent of their parents.
- While only 28 percent of their parents continued their education beyond high school, more than 55 percent of the 1966 graduates continued plus an additional five percent who indicated plans for further education after completing military obligations.
- The level of education of the 1966 graduates' parents is significantly higher than that of the general population of Georgia.

Curriculum Evaluation

- A ranking of high school courses perceived by the 1966 graduates as being most helpful shows the males selecting (1) Mathematics, 29 percent; (2) Language Arts, 25 percent; (3) Physical Science, 17 percent; (4) Social Science, 15 percent; (5) Vocational Education, five percent; (6) Business Education, four percent; (7) Miscellaneous, three percent; and (8) Foreign Language, two percent.
- The females selected (1) Language Arts, 27 percent; (2) Mathematics, 18 percent; (3) Physical Science, 16 percent; (4) Business Education, 15 percent; (5) Social Sciences, 11 percent; (6) Vocational Education, 7 percent; (7) Foreign Language, four percent; and (8) Miscellaneous, two percent.
- A ranking of high school courses believed to be the least helpful in their post high school endeavor shows the males selecting: (1) Social Science, 20 percent; (2) Physical Science, 14 percent; (3) Miscellaneous, 12 percent; (4) Foreign Language, 11 percent; (5) Language Arts, 10 percent; (6) Mathematics, seven percent; (7) Vocational Education, five percent; (8) Business Education, three percent; and 18 percent did not respond to this item.
- The females differed only slightly with the males' choices of least helpful courses. They selected (1) Social Sciences, 22 percent; (2) Physical Sciences, 18 percent; (3) Miscellaneous, 12 percent; (4) Mathematics, 11 percent; (5) Foreign Language, nine percent; (6) Language Arts, six percent; (7) Vocational Education, five percent; (8) Business Education, four percent; and 13 percent did not respond to this item.

- Sixty-five percent of the 1966 graduates believed their high school curriculum was not broad enough to prepare them for their present endeavor. This includes 67 percent of the males and 69 percent of the females.
- A ranking by subject areas of the high school curriculum believed to be needed but not offered shows that the males selected (1) Miscellaneous, 12 percent; (2) Foreign Language, 11 percent; (3) Social Sciences, 10 percent; (4) Physical Sciences, nine percent; (5) Language Arts, eight percent; (6) Mathematics, six percent; (7) Vocational Education, five percent; and (8) Business Education, two percent.
- The females differ significantly from the males in the subject areas they believed to be needed but not offered in their high school curriculum. They selected (1) Social Sciences, 15 percent; (2) Language Arts, 11 percent; (3) Foreign Language and Business Education tied with 10 percent each; (4) Miscellaneous, nine percent; (5) Physical Sciences, six percent; (6) Mathematics, five percent; and (7) Vocational Education, three percent.

Post Secondary Education

- More than 55 percent of the 1966 high school graduates continued their education beyond high school.
- A significantly larger percentage of males (58 percent) than females (52 percent) continue with some form of post secondary education.
- Approximately half of those continuing their education attend four-year public institutions.
- Approximately three out of every four select institutions supported by public funds.
- Three out of every five of those continuing their education attended a four-year institution (public and private).
- One of every six continuing their education attend a junior college.
- One in every seven that continues, attended an area vocational-technical school.
- About four percent of those continuing their education attend privately operated schools of business.
- Another three percent that continue enrolled in schools of nursing.

Location of Institutions

- Eighty-five percent of the graduates that continue with some form of post secondary education selected an institution within Georgia.
- Of those leaving the state, 11 percent attended schools in the five bordering states and other southern states that are members of the SREB.

- Four percent of those continuing their education attended schools outside of SREB.

Attended Institutions of First Choice

- Eighty-two percent of the 1966 graduates continuing their education reported being accepted by the institution of their first choice.
- Eighty-six percent of the females reported attending their first choice school compared to 78 percent for the males.

Attended School Immediately Following Graduation

- Sixteen percent of those continuing their education enrolled in summer school immediately following graduation. This included 17 percent of the females and 14 percent of the males.

Primary Sources of Information on Schools

- A ranking by primary source of information on schools by those attending some form of post secondary education shows the males selected: (1) counselors, 34 percent; (2) parents, 24 percent; (3) other (e.g., college nights), 15 percent; (4) friends, 14 percent; (5) teachers, eight percent; and (6) advertisements, five percent.
- The females differ somewhat from the males in seeking information on schools. They selected: (1) counselors, 27 percent; (2) parents, 26 percent; (3) friends, 23 percent; (4) other (e.g., college nights), 11 percent; (5) teachers, seven percent; and (6) advertisements, six percent.

Sources of Financial Assistance

- A ranking by sources of financial assistance shows that parents rank first with both males and females. Parents of males pay an average of 55 percent of their sons' post secondary educational cost, while the parents of females pay 65 percent.
- Other sources of financial assistance to defray educational expenses cited by the males were: (2) Part-time employment, 13 percent; (3) Scholarships, 10 percent; (4) Savings, nine percent; (5) Loans, eight percent; and (6) Other (i.e., VA and Social Security), five percent.
- Other sources of financial assistance to defray educational expenses cited by the females were: (2) Scholarships, nine percent; (3) Part-time employment, eight percent; (4) Loans, seven percent; (5) Savings, seven percent; and (6) Other (i.e., VA and Social Security), three percent.

Activity Schedule for Graduates Continuing Education

- Eighty-three percent of the graduates who continued their educa-

tion do so on a full-time basis. This includes 80 percent of the males and 85 percent of the females.

- Ten percent of both males and females work part-time and attend day classes.
- Other combinations of school and work show four percent males and one percent of the females working full-time and attending day classes; three percent males and one percent of the females working full-time and attending night classes; two percent of both males and females working part-time and attending night classes; and one percent of the males and females doing extension work.
- For those attending classes and working the males worked an average of 26 hours per week, while the females averaged only 16 hours per week.

Employment

- Approximately 32 percent of the 1966 graduating class reported full-time employment. This includes slightly more than 33 percent females and 30 percent males.

Earnings

- The estimated average annual income for 1966 graduates who sought full-time employment is $3474.
- The males reported an average annual income of $3647. This is $1336 more than the 1966 estimated per capita income for Georgia and $707 more than the United States.
- The females report earning an average of $332 less per year than the males. However, their estimated annual income ($3315) for their first year out of high school is $1004 more than the 1966 per capita income estimate for Georgia and $375 more than the United States.
- Four out of every five graduates (male and female) reported earning more than the Georgia and National per capita income index for 1966.
- Only 18 percent of the males and 22 percent of the females reported income for full-time employment that is less than the current minimum wage standard.

Employment Outlook

- Forty-seven percent indicated they had no plans for changing jobs and expected to remain with their present employer for an indefinite period.
- Twenty-nine percent indicated plans to find something better within the next few months.
- Fourteen percent planned to remain with their present employer for the next two to five years.

- Ten percent expected to remain on their present job for no more than one year.

Service in the Armed Forces

- Approximately 11 percent of the 1966 male graduates are serving with the Armed Forces.
- Of this 11 percent, 73 percent enlisted voluntarily and 27 percent were inducted through the Selective Service.
- More than 84 percent of the graduates who entered the Armed Services plan to take advantage of their educational benefits immediately following their discharge.
- Only four percent of those entering service are giving serious consideration to making the military service their career.

Unemployment

- Less than one percent of the 1966 male graduates reported themselves unemployed.
- Six percent of the female graduates indicated they were unemployed, while an additional nine percent listed themselves as housewives or unemployed housewives.

CONCLUSIONS AND IMPLICATIONS

The data presented in this report permit several conclusions and implications which are relevant to partial assessment and evaluation of the State's effort to afford a comprehensive educational program for every child in Georgia.

CONCLUSION:

Only 45.6 percent of the 1954-55 first grade was graduated in the class of 1966.

IMPLICATION:

During the last decade Georgia has made highly significant and impressive gains toward the development of her human resources. However, far too much of Georgia's talent continues to be wasted. High school graduating classes could be half again their current size without any appreciable loss in quality. Individuals, as well as society, are the big losers when the individual fails to secure the education and training commensurate to his abilities.

Even the most conservative estimate of the waste of talent that accumulates over the twelve-year span of elementary and secondary school would run into millions of dollars. Georgia cannot afford to become complacent with her present educational program. Continuing innovation, experimentation, and evaluation are vitally essential to maximizing our potential in human resources.

CONCLUSION:

Georgia's typical high school graduate is markedly superior to the average non-graduate. The graduate is more intelligent; he has acquired experiences in a broad range of wholesome activities through participation; he has conditioned himself for change; and his prospects for the future are significantly brighter. These are the intangible assets derived from education and affords the individual considerable educational and occupational flexibility.

IMPLICATION:

The occupational structure of Georgia and the Nation is rapidly changing. Unprecedented advancements in technology and automation has not only eliminated many routine jobs, but has erected barriers for entrance

into the many newly created occupations. The ability to make adjustments to the realities of the world or work is dependent upon the social-emotional maturity of the individual as well as his general intellectual abilities. Transition from school to work is far less painful to the individual who has equipped himself for learning in new situations, and is able to cope with broader social interactions.

CONCLUSION:

At graduation, Georgia's 1966 graduates had equalled or surpassed the educational levels of 72 percent of their parents.

IMPLICATION:

A new set of values is apparent among Georgians in the middle and slightly lower socio-economic groups. Motivation for upward mobility is indicated in the acceptance of education as a necessity rather than a luxury.

Prior to World War II, an individual tended to inherit the socio-economic status of his parents, but in recent years education has enabled many to cross stratification barriers.

However, these new values have not yet reached the lower socio-economic levels. Concentrated efforts to stimulate motivation, especially in the early school years, are indicated.

CONCLUSION:

In assessing high school courses available in the curriculum which had proved most helpful and which had proved least helpful since graduation, a large majority (84%) of the 1966 class indicated there were areas of study which contributed little toward post high school endeavors.

IMPLICATION:

The objective of providing comprehensive education for every child in Georgia will require imaginative approaches. The curriculum must be modified to include stronger programs for the semi-skilled, skilled, technical, sales and service occupations. There is also a need to strengthen and enrich academic areas. This might best be accomplished by pooling learning resources and providing for a more flexible organizational structure of the schools.

In response to the needs of some individuals, the elementary schools should provide, in addition to preparation for secondary school, some programs which relate directly to the occupational structure of the community.

CONCLUSION:

A considerable majority (65%) of the 1966 graduates indicated a need for additional courses not available in the curriculum to prepare them for their present endeavors.

IMPLICATION:

Education in Georgia appears to be set upon a course toward greater diversification. It is reasonably realistic to expect that a broader range of educational opportunities commensurate with differential aptitudes and interests should significantly reduce attrition rates and thereby improve the quality of our citizenry. However, we are presently lacking a systematic or standardized method of evaluation at the state level. This void makes it difficult to draw meaningful conclusions about the worth of our programs.

There is a need to identify certain characteristics of all high school graduates and then examine their relationships to the graduates' secondary school and his post secondary pursuits. Every high school should analyze its graduating classes and determine what kinds of students are successful at what colleges, vocational-technical schools, or XYZ industries. The time appears ripe for Georgia High Schools to make internal and external comparisons of the nature, quality, and quantity of its product, the graduate. One approach to evaluation is through standardized statewide testing programs. The feasibility of such a program for Georgia merits serious consideration.

CONCLUSION:

The proportion of high school graduates that seek post secondary education continues to increase. However, there are still several thousand capable graduates that indicate definite interest and intentions in continuing their education beyond high school but fail to do so. Their reasons are varied but lack of information, finances, and family encouragement are high on the list.

IMPLICATION:

In Georgia, the junior college and vocational-technical schools are largely a phenomenon of the sixties. Both have contributed significantly toward the development of our youth by serving many who would not otherwise attend school. The geographic distribution of these institutions has significantly reduced the cost of acquiring additional education. Although vocational-technical schools are tuition free, there remains considerable expenses for subsistence, maintenance, transportation, and recreational activities. Presently the financial aid available to the vocational-technical students is characterized by loan programs with scholarships representing only a token proportion. Many capable students can be attracted to these schools by sustaining

present tuition policies and substantially strengthening financial aid by including scholarships. Counselors, parents, students, and the general public need to be more aware of the tremendous potential that vocational-technical education affords in upward mobility, both economically and socially.

Junior colleges are providing opportunities for thousands of high school graduates to begin their college work at nominal expense, and are also relieving four-year institutions of considerable pressure. The economic barriers for many capable students could be further reduced for attending junior college by adopting the vocational-technical free tuition policy and offering a more liberal financial aid program.

CONCLUSION:

Of the 1966 graduates continuing formal education, 74 percent selected institutions supported by public funds.

IMPLICATION:

State-supported institutions are educating three-fourths of Georgia's high school graduates that seek post secondary schooling, and there is a probability that both numbers and percentages will increase.

Georgia's secondary schools should be particularly responsive to the suggestions of the state universities, colleges, junior colleges and vocational-technical schools in order to properly prepare graduates for the post secondary institutions.

The University System and the vocational-technical schools have a signal responsibility for maintaining quality in educational programs while providing for increased numbers of students.

CONCLUSION:

High school counselors rank highest (as compared with parents, teachers, friends, etc.) as the primary source of information for graduates seeking advice on post high school placement.

IMPLICATION:

The high school counselor must assume heavy responsibility for planning the future of individual students. Frequently the counselor's advice is not sought until the student is near graduation, and by then it is too late to develop a secondary school program compatible with the student's future plans.

Georgia schools need an expanded and strengthened guidance program at both elementary and secondary levels. Guidance would include counseling, but it would also serve other vital functions such as orientation, analysis, informational services, placement and evaluation. It would relate the student and his potential to the opportunities available

in post secondary education and in the community. A strong guidance program could materially reduce the dropout rate and encourage additional education appropriate to the individual's desires and abilities.

CONCLUSION:

Approximately 45 percent of the 1966 graduates did not seek additional formal education.

IMPLICATION:

High school will continue to be terminal education for a large segment of the population in the foreseeable future. While the high school graduate has significant advantages over the dropout, the transition from school environment to a work situation is often difficult.

More effective cooperation between secondary schools and industry could greatly ease the assimilation of high school graduates into the working force. Industry could provide the schools with information on job vacancies, qualification requirements, conditions of employment, etc., while the schools could provide information on the characteristics of graduates, training, etc. An active school-industry program could maximize opportunities for the job-seeking graduate.